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# Practices and rationales of community engagement with wind farms

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# Practices and Rationales of Community Engagement with Wind Farms: Awareness Raising; Consultation; Empowerment

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Dr Mhairi Aitken is a sociologist and research fellow at the University of Edinburgh. Her research focusses on social dimensions of sustainability and energy policy. In particular her work critically examines the role of members of the public – and public knowledge – in planning processes around wind farms and the various opportunities for community members to become involved with renewable energy projects. Her wider research interests relate to discourses of climate change and sustainability and their impacts for policy and public engagement.

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Practices and Rationales of Community Engagement with Wind Farms: Awareness Raising; Consultation; Empowerment

**Abstract:**

In light of the growing emphasis on community engagement in the literature on renewable energy planning, and given the acknowledgement of the complexity of 'community engagement' as a concept, we conducted an empirical review of practice relating to community engagement with onshore wind farms in the UK. The research explored what is actually happening in terms of community engagement relating to onshore wind farms and examined the rationales underpinning approaches to community engagement. We found that a wide range of engagement methods are being used in relation to onshore wind farms across the UK, but that these are predominantly focussed at consultation and awareness raising. Developers typically retain considerable – or total - control within such engagement processes. However, the case studies presented in this paper also evidence some innovation in engagement methods. Through this research we develop and test a non-hierarchical classification of community engagement approaches: Awareness Raising; Consultation and Empowerment. This provides a useful tool for reflecting on practices and rationales of community engagement. By considering the three approaches non-hierarchically, this model allows for an examination of how such rationales are acted on in practice.

**Key Words:** Community Engagement; Wind Power; Planning; Renewable Energy

# Practices and Rationales of Community Engagement with Wind Farms: Awareness Raising; Consultation; Empowerment

## Introduction

Academic and policy literatures relating to the planning of renewable energy projects place increasing emphasis on the importance and value of community engagement. This in part reflects democratic principles underpinning planning systems, but is also largely a reflection of the challenging nature of public relationships with renewable energy projects – particularly onshore wind farms.

Localised public opposition to onshore wind farms has frequently been pointed to as an obstacle – or at least a challenge – for the realisation of renewable energy deployment targets (see Aitken, 2010a; Bell, Gray & Haggett, 2005). Whilst onshore wind farms are the most mature renewable energy technology currently available, deployment targets have not been realised. There are a number of factors contributing to this (Toke, Breukers & Wolsink, 2008); however significant attention has been paid to local community opposition to proposed developments. This is perceived by many to be causing a 'bottleneck' in the planning system (Ellis *et al* 2009, Haggett & Toke, 2006).

Research on this topic is not new, however over recent years a shift in approach has become evident. Previously the literature was largely aimed at understanding public opposition in order to overcome or avoid it. Taking this approach it all too often provided simplistic descriptions or classifications overlooking the values and experiences underpinning local opposition. This served to demean the positions and viewpoints of objectors (Aitken, 2010a).

The NIMBY (Not In My BackYard) paradigm is a prime example of this and critiques of NIMBY explanations now abound within the literature (e.g. Wolsink, 2000; Devine-Wright, 2005; Haggett, 2010a; Rudolph, 2014). Recent years have witnessed a rise in qualitative studies exploring in considerably more depth, the nuances and realities of public opposition and support (e.g. Pepermans & Loots, 2013; Hall, Ashworth & Devine-Wright, 2013; Anderson 2013; Waldo 2012). This growing body of literature points to the complexities of public opinions (e.g. Bell *et al* 2013); to the importance of considering local values and contextual factors (e.g. Devine-Wright, 2005); to the considerable value of local knowledge and experience (e.g. Aitken, 2009) and; to the multiple forms that responses to wind farms can take (e.g. Ellis, *et al* 2009; Batel *et al* 2013). In doing so it has highlighted the limited utility of managerial approaches to addressing public opposition.

A central theme to emerge through this literature is the importance of trust. Trust built up in planning and pre-planning processes can lead to increased levels of support for proposed developments and developers (Wolsink, 2007; Haggett, 2009). As Gross (2007) has observed, perceived fairness of outcomes is inextricably linked to perceived fairness of processes. Seeking to understand opposition simply to overcome or avoid it does little to engender trust, rather such instrumental approaches to community engagement can in fact cause considerable harm to developer/planner-community relationships and in many cases are a contributing factor to the emergence or crystallisation of local opposition. As Wynne (2006, p.219) has noted "it is a contradiction in terms to instrumentalize a relationship which is supposed to be based on trust". He cautions that those conducting community engagement should not expect participants "to trust oneself, if one's assumed objective is to manage and control [their] response" (ibid. p.219-220).

Therefore, the literature relating to public responses to wind farms now points to a consensus around the importance of effective community engagement to understand and address local

concerns, values and/or priorities. Moreover, this emphasis on the importance and value of community engagement is similarly found in policy documents (Rydin & Pennington, 2000; Haggett, 2010b).

However, this enthusiasm for, and professed commitment to community engagement does not easily or predictably translate into meaningful engagement in practice. This is in no small part due to the fact that the term *'community engagement*' can be interpreted in many different ways and community engagement is undertaken for a variety of reasons. In what follows, we discuss the broader literature on community engagement, particularly relating to planning. We then describe the methods used in this research, and present our analysis of a series of case studies, for which we have developed a new framework to understand the practices of engagement being used. We reflect on the significance of our analysis, both for the literature on this topic and best practice in community engagement.

## What is community engagement?

The prominent emphasis on community engagement in relation to renewable energy can be seen as a reflection of a wider resurgence of interest in public engagement in diverse policy areas (Pieczka & Escobar, 2013). For example, Coleman and Gotze (2010, p. 4) have pointed to a widespread commitment to public engagement - conceived of as a mechanism for addressing problems in democratic societies such as: "falling voter turnout; lower levels of public participation in civic life; public cynicism towards political institutions and parties; and a collapse in once-strong political loyalties and attachments". For Wilsdon and Willis (2004, p.16) the emphasis on engagement represents a wider pattern whereby the "standard response" of government to public ambivalence or hostility towards technological, social or political innovation is "a promise to listen harder".

Community engagement – or public participation – has been a recurring subject of debate within the planning literature since at least the 1960s (Brownill & Parker, 2010). In research on engagement, the underlying presumption has often been that greater public participation in decision-making processes will lead to more socially acceptable and hence sustainable outcomes (e.g. Buchy & Hoverman, 2000; Chilvers, 2008). Incorporating the views of members of the public into planning decisions is seen to give greater legitimacy to those decisions. It has been acknowledged that from the mid-1990s onwards politicians and policy-makers have come to make frequent use (and misuse) of the term 'collaborative planning' (Healey, 2003). Kaza (2006, p.256) contended that: 'The participatory approach in the public planning domain has become institutionalized as a method of good planning practice' and that 'democratic principles and public participation have become increasingly accepted as means for balancing and rationalizing multiple interests and preferences'. Rydin (2007, p.54) asserts that within planning theory the 'new orthodoxy clusters around the idea that the core of planning should be an engagement with a range of stakeholders, giving them voice and seeking to achieve planning consensus'.

However, community engagement is not straightforward, and fulfilling commitments of public participation presents challenges and dilemmas in practice. Tensions remain between vocal commitments to democratic principles within planning processes and concerns about the practical value and limitations of public participation. There is debate as to the extent to which participatory processes in fact satisfactorily reflect public interests or give public participants meaningful and influential roles. One important area of consideration is who participates, and equally who does not participate. Critical attention must be paid to which voices dominate participatory processes (Hillier, 2000; Kaza, 2006). Within local contexts there can be many conflicting interests (Kaza, 2006) and existing relationships of power play critical roles (Healey, 2003). Thus, participatory approaches to planning are fraught with

difficulties and challenges. 'Democratic planning, then, must reconcile a complex of precepts which are desirable, but which pull in different directions' (March, 2004, p.412). Ultimately, 'an inclusionary collaborative process does not necessarily guarantee the justice of either process or material outcomes' (Healey 2003: 115). Whilst conducting or facilitating community engagement requires considerable attention to the processes opened up, for some this emphasis on process risks diverting attention from 'the justice and sustainability of the material outcomes of planning interventions' (Healey 2003: 110).

At the heart of some of these debates are differences in the way in which participation and engagement are understood. Within the planning literature participation is broadly conceived in two ways: '1: Participation as an approach, an ideology, a specific ethos for community development and 2: Participation as a method, a set of guidelines and practices of involving communities or the general public in specific planning activities' (Buchy & Hoverman, 2010, p. 16). Beyond planning theory there are comprehensive literatures on the subject of *public engagement* – which is broadly and variously defined. The focus in literature on public responses to wind power tends to relate to *community* engagement, with community typically defined in spatial terms. However, the broader debates around public engagement remain highly relevant to community engagement with wind power. In these literatures public engagement can take myriad forms, serving a variety of purposes (see Wilsdon & Willis, 2004). Public engagement can be conducted instrumentally as a means to a particular end (e.g. overcoming or avoiding public opposition). Alternatively, it can be conducted with the intention of improving plans/policies/projects and creating socially acceptable outcomes reflecting public interests (e.g. Agrawal & Gibson, 1999; Holmes & Scoones, 2000; Buchy & Hoverman 2010). It can be undertaken following a normative position which sees engagement as simply "the right thing to do" (Wilsdon & Willis, 2004, p.39), or from a substantive position aiming to bring about wider benefits beyond a particular project, for

example building social capital or capacity among community groups (*ibid.*). Engagement approaches can also vary between mechanistic approaches, which aim at facilitating practical exercises to "get people's input on something", and humanistic approaches which have broader aims including benefitting or empowering participants (INVOLVE 2005, p.18).

Given the variety of rationales underpinning community engagement and the different purposes it can serve, it is perhaps inevitable that this takes many different forms. Rowe & Frewer (2005, p.252) argue that public involvement "as widely understood (and imprecisely defined) can take many forms, in many different situations (contexts), with many different types of participants, requirements, and aims (and so on), for which different mechanisms may be required to maximize effectiveness (howsoever this is defined)". Academic and practitioner literatures on both public and community engagement contain many different typologies and classifications of forms of engagement. In the main these take as their starting point Arnstein's (1969) ubiquitous ladder of public participation. This sets out eight levels of participation broadly summarised as representing 'Non-Participation', 'Tokenism' and 'Citizen Power'. On the bottom rungs of the ladder (Non-Participation) engagement is viewed instrumentally as an opportunity to educate the public and/or engineer support. In the middle of the ladder, tokenistic forms of participation include informing and consulting members of the public. Arnstein suggested that both of these could be valuable first steps towards participation but that they are limited by the lack of influence which participants have. Consultation is described as being a cosmetic 'window-dressing ritual' with little impact. The top rungs of the ladder require redistribution of power to members of the public.

Arnstein's model has been adapted by a large number of individuals and organisations in developing alternative classification systems and models (Haggett, 2010b). This has resulted in a proliferation of typologies, tool kits and models which can be referred to in designing and/or evaluating public/community engagement approaches. Aitken (2014) has observed

that these models, whilst adopting varying terminology and structures, typically follow common patterns:

> ‘Each starts with a ‘bottom’ layer of engagement which is essentially concerned with information provision […] They then have one (or more) layer(s) with limited forms of public feedback into decision-making processes (consultation), and finally they each have a ‘top’ layer with more participatory forms of public engagement which give greater control to participants’
> (Aitken 2014: 42)

The pattern within these classifications points towards a hierarchy of engagement approaches, with information provision positioned at the bottom and more substantive approaches at the top. Aitken (2014) summarises these classifications under the headings of: Awareness Raising; Consultation and; Empowerment.

*Awareness Raising*

Forms of engagement classified as awareness raising are essentially concerned with the dissemination of information. Where awareness raising is conducted on its own (i.e. where this represents the entirety of a community engagement approach) this represents a minimal form of community engagement. It may even be argued that awareness raising on its own (as one-sided and unidirectional information provision) should not be considered public engagement (Dialogue by Design, 2008). Rowe and Frewer (2005, p 255) note that at this level “Information flow is one-way: there is no involvement of the public per se in the sense that public feedback is not required or specifically sought”. Awareness raising when conducted on its own is somewhat limited in what it can achieve but is focused at increasing awareness or understanding of particular issues.

*Consultation*

Consultation aims to gather insights into the views, attitudes or knowledge of members of the public in order to inform decisions. It can involve (to varying degrees) two-way flows of information. Wilcox (1994, p.11) contends that: "Consultation is appropriate when you can offer some choices on what you are going to do - but not the opportunity [for the public] to develop their own ideas or participate in putting plans into action". Consultation provides the means for public views to be captured and taken into consideration but does not necessarily mean that these views, or public preferences and/or concerns will be acted on or addressed (Dialogue by Design, 2008; Haggett, 2008; INVOLVE, 2004).

Consultation can be either a one-way or two-way process. In a one-way process public opinion is sought on pre-defined and inflexible topics or questions, whereas a two-way process can include opportunities for respondents to reflect on and/or question information provided by those running engagement exercises (Rowe & Frewer, 2005). Such two-way processes can ensure the questions asked, and subsequently the responses given reflect the interests and priorities of those being engaged. It can also facilitate dialogue and "deeper" forms of engagement.

It is widely recognised that consultation will be best-received and most effective when it is perceived to be meaningful. This means that participants want to know how their views are taken into account and what impact the consultation has had (i.e. how has this informed decision-making) (e.g. Dialogue by Design, 2008; INVOLVE, 2004; Wilsdon & Willis, 2004; Haggett, 2009). Davidson *et al* (2013, 4.30) caution that: "Consultation can be a valuable mechanism for reflecting public interests, but can also lead to disappointment and frustrations if participants feel that their views are not being taken

seriously or that the exercise is used to legitimise decisions that have already been made".

*Empowerment*

Approaches to community engagement which can be classified under the heading of empowerment are those which would be positioned at the top of Arnstein's (1969) ladder of participation. These approaches involve the devolution of power to participants and the creation of benefits for participants and/or wider society. This can be achieved through community led forms of engagement where community members themselves design the process and determine its objectives, topics of relevance and scope (Rowe & Frewer, 2005; Wilcox, 1994) or through partnership approaches (OECD, 2001; INVOLVE, 2004; Wilcox, 1994). It might also be achieved through engagement approaches which bring together community members in ways which build relationships and social capital which will continue after the engagement process ends (INVOLVE, 2005).

Empowering forms of engagement can lead to outcomes of increased relevance to communities and which most accurately reflect community interests and values (Landscape Design Associates, 2000; INVOLVE, 2004). However, they can also be more expensive than traditional forms of engagement given that they necessitate more open and flexible timeframes and may require extra skills related to facilitation and negotiation (Haggett, 2009; INVOLVE, 2004). Individuals or organisations preparing to submit planning applications may also be hesitant to divest any amount of control in design and/or decision-making processes.

Existing classifications of engagement approaches have typically considered the various forms of engagement in a hierarchical manner. However, each broad approach described

above can add different value and play important roles in community engagement. In practice it may be most appropriate for community engagement to use a range of methods reflecting different rationales and objectives (Davidson *et al,* 2013). As such, we suggest that the three broad approaches can be conceptualised as complementary, as illustrated in the Venn diagram in Figure 1. Community engagement might involve multiple methods addressing one, two or all three approaches/objectives: raising awareness amongst community members; consulting them on their views/knowledge/experience and; empowering community members through ensuring that consultation responses are meaningfully addressed, building capacity and social capital amongst participants and adding value within the community.

**<Insert Figure 1 around here>**

Thinking of the different approaches to community engagement, not as alternatives to one another but rather as complementary, may be helpful in both planning and evaluating community engagement. We suggest that the Venn diagram provides a useful visual tool for conceptualising community engagement and reflecting on its diverse functions. As a tool for planning or evaluating community engagement the diagram encourages reflection on the extent to which each of the approaches are being/can be reflected. Where community engagement methods are clustered in one area of the Venn diagram we might consider what impact this has on outcomes as well as on participants. It is not necessarily the case that all community engagement initiatives reflect all three of the approaches, however mapping the methods used in this way is a helpful exercise in making explicit which objectives are underpinning approaches to community engagement.

Review of Current Practice: Methods

In light of the growing emphasis on community engagement in the literature relating to renewable energy planning, and given the acknowledgement of the complexity of

'community engagement' as a concept, we conducted an empirical review of actual practices relating to community engagement with onshore wind farms in the UK.

The research set out to explore the current practices being used, and to examine the rationales underpinning approaches to community engagement. In order to narrow the scope of the study we chose to focus on case studies which might be considered examples of good practice in community engagement. This was defined as instances where developers had exceeded minimum requirements for community engagement (these minimum requirements are detailed below). It was hypothesised that cases where developers had gone beyond minimum standards of engagement would be most likely to evidence a range of engagement methods thereby enabling insights into the range of techniques being used in the U.K. and the various rationales underpinning them. Inevitably this means that the case studies discussed in this paper may not be typical of wider experiences, however they are valuable as illustrations of current good practice. As such they indicate a benchmark for the current state of play in community engagement with wind power in the UK, and offer the opportunity to explore where improvements are needed.

The initial stage of the research consisted of an extensive review of academic and grey literature relating to community engagement for wind power. This was combined with a review of relevant policy documents and available reports from commercial developers, community developers, local authorities and government bodies across the UK countries. This review identified relevant planning policies and guidance and examined the legally provided opportunities for community engagement within the various planning regimes. Through this review we also searched for available material (e.g. planning documents, media coverage and developers' reports) relating to community engagement around wind farms (including ones which were currently in planning as well as others for which planning applications had already been determined). Given the very large number of planning

applications for wind farms in the U.K., there was an enormous number of potential case studies. For this reason, it was decided that focussing on examples which might be considered to show good practice in community engagement would be a valuable means of narrowing the scope of the study. The first stage of sampling involved identifying case studies about which there was sufficient information available online to allow an analysis of the community engagement approach. In the second step the case studies were screened to identify which ones had involved community engagement exceeding the minimum standards relevant to their locations. As part of the project funding remit, we selected case studies from Scotland, and then comparative examples from England and Wales, in order to explore any relevant differences between them (see below for the discussion of the different regulatory regimes in each country). In order to keep the scope of the study manageable and to permit sufficient depth of analysis, a further round of screening was conducted to identify the final sample that included six case studies (four from Scotland and one each from England and Wales). The final case studies were selected based on the availability of material to enable depth of analysis and the extent to which there was evidence of developers having exceeded minimum standards. Six was considered a sufficient number of case studies to examine the range of engagement methods used across the U.K., whilst being small enough to enable in-depth analysis. While we cannot make claims to representativeness or generalizability from this small number of case studies, the aim was rather to consider in depth a selection of case studies from which we could examine the range of engagement methods being used and to test our model of engagement approaches. One limitation of this selection process was the necessary availability of initial information online that indicated good practices of community engagement related to certain cases.

The next stage in the research was an in-depth exploration of the identified case studies. This involved extensive desk-based research reviewing the selected documents and interviews

with representatives of developers, local councils, planners, and community councils relating to the particular wind farm case studies. In total, 8 telephone interviews were conducted between December 2013 and February 2014. These interviews enabled a more detailed understanding of the rationales and values of the approaches to engagement undertaken. Interviewees were identified through our review of case studies. Interviews were conducted using a semi-structured interview schedule, which ensured similar issues were explored in order to guarantee a degree of comparability, whilst also being flexible enough to explore the different contexts, characters and issues of particular case studies. The interviews explored the approaches that developers took; their reasons for going beyond minimum requirements for community engagement; their perceptions of existing guidelines and requirements, and their reflections on the value of community engagement. Interviews with planners, local councils and community councils focused on their perceptions of the process and how much opportunity and impact they felt the community had. These interviews enabled a fuller picture of the principles and processes of engagement in each case study.

All the evidence collected through the case studies was reviewed and analysed by the research team. Our data analysis took the form of classifying the range of practices undertaken in each context (e.g. methods for community engagement, time frame in which they are used, participants involved, locations used, open or closed access, how responses are gathered and used); and then categorising these practices in terms of our classification of community engagement approaches (Awareness Raising, Consultation, Empowerment). Inevitably such classifications are highly subjective and analysing the community engagement approaches in this way necessitated a great deal of critical reflection and deliberation amongst the research team. Since there can be different rationales underpinning community engagement (even where the same methods are being used), there are instances where it might be argued that a particular method could be placed in more than one location

within the Venn diagram. The rationale underpinning the method and the particular ways in which it is employed might change which approach it reflects. In order to explicitly reflect on the challenges of this, we each individually mapped the engagement methods for each case study and then discussed our decision-making. Where there was disagreement amongst the research team we deliberated the various possible interpretations and reflected on these in relation to the available evidence pertaining to the particular case study until consensus was reached.

In many instances, where different classifications appear possible, this relates to whether consultation methods might also be considered to be empowering, or whether awareness raising exercises might also be considered to have a consultative element. In the first case, we decided that consultation methods could only be viewed as empowering if there was clear evidence of impact (i.e. tangible outcomes or substantive changes) coming from the consultation. Whilst empowerment could occur in other ways (e.g. capacity building or increasing social capital) this was the form of empowerment which could be observed most clearly. In the second case, we decided that awareness raising exercises could only be considered to include consultation if there were clear mechanisms and channels in place through which community members' views would be fed back to developers.

Having outlined the methods and analytical approach used, we now discuss the minimum requirements for community engagement in each of the countries studied, before presenting our analysis of the case studies.

## Minimum Requirements for Community Engagement

### *Scotland*

Community engagement is described as central in the Scottish planning system and should be early, meaningful and proportionate (Scottish Government, 2013a). There are statutory standards for minimum requirements of community engagement at the pre-application stage for major developments (wind farms of a capacity greater than 20MW). Smaller developments are not subject to statutory Pre-Application Consultation (PAC). The purpose of PAC is to better inform communities and provide them with an "opportunity to contribute their views before a formal planning application is submitted to the planning authority" (Scottish Government, 2013b, p.8). The pre-application dialogue between the applicant and the community aims to "improve the quality of planning applications, mitigate negative impacts where possible, address misunderstandings, and to air and to address where practicable any community issues" (Scottish Government, 2013b, p.9). Minimum requirements for PAC are that developers must hold at least one public event which must be advertised with a notice of at least seven days (Scottish Government, 2013b). However, the "prospective applicant is under no obligation to take on board community views, or directly reflect them in any subsequent application" (Scottish Government, 2013b, p.9).

A subsequent PAC report should specify how and who has been consulted and how this complies with statutory requirements. Legislation does not specify the content of the report, but a useful minimum is considered to "set out how the applicant has responded to the comments made, including whether and the extent to which the proposals have changed as a result of PAC" (Scottish Government, 2013b, p.14). The Local Planning Authority can validate the quality of the public event and may "conclude that the events were so ineffectual that the applicant has failed to carry out the required step" (Scottish Government, 2013b, p.24). After submission to the Local Planning Authority, the public has a 21 day window in which to submit formal representations on the application. The decision will be made, in part,

on the basis of the received comments and representations from the public and other organisations.

Wind farm developments with capacities greater than 50 mega watts (MW) are determined by the Scottish Government, and in these cases a consultation timeframe of 28 days is provided for the public to comment on applications. A public inquiry must be convened if local authorities, in their role as statutory consultees, object to the application.

*England*

In England wind farms with a capacity of more than 50 MW are directly determined by the Secretary of State for Energy and Climate Change (DECC, UK Government). Wind farm proposals with capacities of less than 50 MW fall under the jurisdiction of Local Planning Authorities according to the Town and Country Planning Act 1990. Similar to Scotland, England also pushes for enhanced consultation practices with local communities, which has culminated in compulsory pre-application consultations for proposed wind farms with capacities greater than 50 MW (DCLG, 2013, p.5). Effective pre-application consultation is the first step of community involvement and is supposed to lead to planning applications that are better developed and better understood by the public, allowing for shorter and more efficient application processes. Rather than standardised approaches, applicants and local authorities are expected to work together to develop unique plans for consultation that are proportionate to the size of the development and are appropriate to the local community context.

With regard to developments smaller than 50 MW, the Local Planning Authority will publicise the proposed development after the formal submission of the planning application by the applicant. However, the applicants may also initiate their own public consultation process prior to the submission of the application. In 2013 pre-application consultation

became a compulsory component for smaller developments of more than 2 turbines or any turbine exceeding a hub height of 15m (UK Government, 2015).

Apart from flexible and case-specific pre-application consultation for large wind farms, community engagement in England is predefined by strict timeframes set out in the Planning Act 2008 and the Town and Country Act 1990. During the examination process of a proposed wind farm project, local communities and members of the wider public can register as an interested party to be updated on the development progress. They can also submit written comments and representations, or request to speak at a hearing. Moreover, the UK government announced new considerations so that local people have the final say on wind farm decisions. This took effect in June 2015. This is to be applied by local planning authorities which need to prove the backing of affected communities by demonstrating that identified impacts and concerns have been fully addressed (UK Government, 2015).

*Wales*

Wind farm planning in Wales has broadly followed the norms provided by the UK Government. Thus, wind farm developments larger than 50 MW are determined by the Department of Energy and Climate Change (DECC) in accordance with the Planning Inspectorate. Wind farm developments with a capacity of less than 50 MW are approved by Local Planning Authorities in Wales.

Technical Advice Note 8 (TAN8) outlines expectations for active and early engagement with local communities about proposed wind farm developments. Community Engagement in wind farm planning is a matter that should be addressed in a partnership approach between the developer and local authorities. “Developers, in consultation with local planning authorities, should take an active role in engaging with the local community on renewable energy proposals. This should include pre-application discussion and provision of

background information on the renewable energy technology that is proposed" (WAG 2005,p.8).

A 'protocol for public engagement' (CSE, 2007) specifies the policy background and good practices of public engagement in wind farm planning in Wales. It provides detailed and comprehensive guidance for public engagement in order to exemplify how such "undertakings may be delivered in the specific context of wind energy projects" (CSE, 2007, p.8). This is non-statutory and non-prescriptive guidance that may be adopted by developers, local authorities and communities in order to comply with the outlined standards. Further good practice guidance published by the Welsh Assembly Government (WAG, 2011) regards community involvement as a foundation for social and economic benefits rather than the opportunity to influence the outcome of the project.

Case Studies

The case studies included in the study and the various engagement methods used are summarised in table one.

**<Insert table 1 around here>**

Discussion of Case Studies

**< Insert figure 2 around here >**

As illustrated in Figure 2, a significant finding of our research is that a wide range of engagement methods are being used in relation to onshore wind farms across the UK, however, it is evident that these are predominantly focussed at consultation and awareness raising. The dominant approaches consist of a range of awareness raising activities such as public exhibitions and drop-in sessions, complemented by consultation exercises such as surveys or comment cards. These methods largely represent developer-controlled, traditional

engagement methods. Flows of information through such methods are constrained by selected information being transmitted to particular communities by developers, or information being sought from communities in relation to topics defined as relevant by developers. Thus, developers typically retain considerable – or total - control within such engagement processes.

Nonetheless, the case studies also evidence some innovation in engagement methods. For example, at Pen Y Cymoedd, traditional engagement methods were complemented by digital techniques including a crowd-sourcing exercise to explore ideas for the community benefits fund. The use of innovative e-planning methods like this have been noted in recent literature on community engagement, where it has been contended that such e-methods potentially address long-standing challenges associated with community engagement/public participation (e.g. Aitken 2014, Brabham 2012, Kubicek 2010). In two case studies (Pen Y Cymoedd and Carron Valley) workshops were used in addition to conventional meetings. These facilitated more active engagement with community members and were described as encouraging greater dialogue and interaction. A representative of PfR (Partnerships for Renewables, Carron Valley) described workshops as one way of addressing the often confrontational or antagonistic nature of public meetings, which can be dominated by strong voices, a sentiment echoed across other case studies. These more dialogic forms of community engagement enable a wider range of issues to be discussed and can be seen to devolve some control to participants through allowing them to set or shape the agenda for discussions. For this reason stakeholder workshops have been classified as representing consultation and empowerment. However, the extent to which participants are actually empowered through such processes will depend on how these are facilitated and the extent to which participants are able to influence – or ideally lead – the processes and outcomes. In a broader sense such processes may have empowering effects if they lead to capacity building, skills creation or increased

confidence of participants. Such impacts may be possible through deliberative engagement methods where individuals are taking part in processes and interacting with organisations or in contexts with which they are unfamiliar or lack previous experience of. Such broader empowering outcomes may have occurred but are difficult to identify through this study. In order to explore such dimensions, further primary data collection would be needed such as interviews or ethnographic observation to establish the impacts of engagement within the community.

Our interviewees indicated that community engagement was most effective when it involved dialogue and interaction rather than one-way information provision. This means that concerns are taken seriously and responded to and/or addressed (e.g. through a follow-up phone call or visit to residents' homes). For example, a local councillor speaking about the Burton Wold wind farm described a process by which local people expressed their concerns about interference with television reception and the developer agreed to fund a firm to go around to correct this, provide extra equipment to overcome this problem, and to trim the blades of the turbines so that they would not create flickering effects. The councillor described this as an "intelligent approach to community engagement". On the basis of our research, attempts to find out what the issues were, and to ensure that developers recognised any possible adverse consequences for the community and make provisions to deal with them, were very much welcomed. Another example is at Pen Y Cymoedd, where apprenticeships have been created associated with the development – in interview this was described as being as a result of consultation responses received through community engagement.

Underlying many of these methods needs to be, as one councillor said, a willingness by a developer to expose themselves to questioning and argument – i.e., to actually *engage* with a community, rather than merely providing information or being defensive. However, across the case studies, examples of where people were informed of tangible changes resulting from

their comments were rare. Many of the more traditional consultation methods included in Figure 2 might be considered to have empowering effects if they lead to meaningful impacts or substantive outcomes, however within our research we found very limited evidence of this.

The developers we interviewed as part of this research had all taken extra effort to engage the public and they consistently described community engagement as being a critical component of planning and development processes. Engagement was described by one developer as being not simply "an add-on" but an integral part of the process. The explanations given for such commitments to community engagement reflected instrumental, normative and substantive rationales, which were sometimes expressed simultaneously by the same individuals. Developers demonstrated these rationales in the following ways:

- ***Instrumental***
    - Good community engagement "keeps people on side"';
    - Being transparent and open is more likely to lead to community support for the project, which in turn can increase the likelihood of planning success;
- ***Normative***
    - It is important to keep the community informed;
    - It is important to give the community opportunities to express any concerns;
- ***Substantive***
    - Engaging community members in the process can ensure that they benefit from (or are not negatively impacted by) the development.

However, despite the range of rationales for community engagement that were articulated, the dominant positions remained largely instrumental and it is these instrumental positions which can be seen to most clearly influence the design of engagement approaches (leading to the

dominance of narrow consultation and awareness raising methods). Developers who described substantive positions underpinning their commitments to community engagement were also those who had undertaken more extensive or innovative engagement methods. This suggests that such positions resulted in developers seeking out new ways of engaging with communities in order to maximise benefits in a broad sense.

*Community benefit funds*

Community Benefits are now a standard feature of wind farm developments in the UK (Markantoni & Aitken, 2015). In case studies where consent was granted, interviewees described how, after securing planning consent, community engagement efforts were reoriented towards developing ideas for the management and implementation of community benefits.

During pre-application engagement and planning processes, community benefits are typically not discussed in any detail given that these are not material planning considerations (Aitken 2010b; Rudolph, Haggett & Aitken, 2015). Nevertheless there is evidence that expectation of community benefits impacts on local acceptance of proposed wind farms (both positively and negatively). For example, on their website the Glyncorrwg Action Group (which opposed the Pen Y Cymoedd wind farm) states that:

> "Developers offer community gain which is one of the devices offering incentives which divide the community and blind people to the fact that short-term gain can lead to long term losses of our beautiful landscape. In this disadvantaged community this has swayed some people into accepting the unacceptable."

Conversely, the deputy leader of Neath Port Talbot Council was quoted in the local newspaper as saying that "the long term benefits of the Pen y Cymoedd project would

outweigh any short term disruption of the scheme" (South Wales Evening Post, 2012). Clearly, perceptions of benefit and the stage at which they are discussed impacts upon public acceptance.

However, in our analysis of community engagement approaches taken within the case studies, we have not included community benefits, due to the remit of our project on procedures of community engagement. Nonetheless, we have included the Local Energy Organisation which provides discounted electricity to local residents around Burton Wold as an example of where local residents have taken on a key role in setting up and running this aspect of the development. Furthermore, the Local Energy Organisation represents a rare example of a substantive impact of community consultation since discounted electricity was something which was identified and demanded by local community members participating in consultation processes. Therefore, the Local Energy Organisation has been included as an example of empowerment for two reasons: firstly; because it represents an initiative which is controlled by community members, and secondly; because it is a clear example of consultation having had tangible outcomes.

Community benefits have the potential to have empowering effects if they are facilitated through community-led processes and/or if their impacts lead to broader positive impacts for communities (such as building social capital or capacities). However, the extent to which community benefits have such empowering effects remains debateable (e.g. Markantoni & Aitken, 2015).

*Challenges*

The interviews with developers revealed a number of challenges associated with conducting community engagement. It was suggested that proposing a wind farm is inherently controversial, meaning that some opposition or resistance to community engagement may be

inevitable. Relatedly, it was stated that the wind power industry's reputation has been tarnished by previous bad practice which shapes people's expectations and willingness to participate in community engagement processes. In some cases, it was felt that the local community suffers from "developer fatigue" due to the high number of previously proposed wind farms, and is not interested in participating in further community engagement. Lastly, in some locations the relevant or affected community/ies can be located across large areas making it challenging to identify the relevant community/ies to engage with and/or create satisfactory opportunities for engagement of all community members.

The challenges of identifying or demarcating "communities" are widely acknowledged (e.g. Kepe 1999; Walker, 2011, Creamer, 2014, Haggett and Aitken, 2015). Where external actors engage with communities which are defined narrowly by geographic boundaries, they risk excluding relevant or interested parties or overlooking or exacerbating existing power inequalities (Kepe, 1999). In this way community engagement can be disempowering and harmful to communities. Moreover, there may not be one homogenous "community" but rather particular localities can have many divergent and at times overlapping communities. Individuals may feel a sense of belonging not simply to communities of place but also – or instead - to communities of interest. This means that identifying who it is that developers should engage with is problematic. Yet in setting up and conducting community engagement, developers routinely define or at least set limits on who is considered "the community". This may facilitate more efficient engagement activities but may also limit or negate the value of community engagement. As Barnett et al (2012) have observed, the ways in which renewable energy actors engage with members of the public reflects the ways in which those publics are 'imagined'. Preconceptions of members of the public inform developers' approaches to community engagement, at times leading them to close-down engagement so as to avoid negative public responses or opposition even where this has not been demonstrated in the

particular local context (ibid.). Therefore, just as the notion of "community" is problematic in theory, so in practice reflection is needed on how, and by whom communities are defined and also the ways in which developers' previous experiences or preconceptions are influencing decisions on community engagement strategies.

## Conclusions

Academic and policy literatures relating to renewable energy development (particularly wind farms) place increasing and significant emphasis on community engagement. This has evolved from a previous emphasis on managing or avoiding negative public responses and reflects the growing recognition of the nuanced and complex nature of public attitudes and responses. Our research has demonstrated tha,t to a certain extent, this increasing emphasis on community engagement and planning *with* communities is reflected in the practice of developers. The case studies we examined were selected as examples of good practice – they were instances where developers exceeded minimum standards of community engagement – and as such they may not be representative of wider engagement practices. However, they highlight the range of engagement methods which are being used and also a number of novel and innovative approaches which have the potential to be used much more widely. It is noteworthy that all the developers we spoke to described significant commitments to community engagement and often saw this as having more than simply instrumental benefits. Developers also spoke of the harm that had been caused to the renewables industry through previous bad practice in community engagement, and described good community engagement as being important not simply in terms of individual projects but for improving the image of the industry more widely and securing public support for renewable energy. Nevertheless, even within these good practice case studies, there is a clear dominance of traditional awareness raising and consultation engagement methods. This suggests a reliance on tried and tested approaches to community engagement and also implies that developers

may be reluctant to adopt more innovative methods which necessitate devolving some control to participants, or at least allowing considerably more flexibility in engagement processes. The dominant methods are largely rigidly controlled by developers and allow for only limited flows of information. This resonates with broader debates around public engagement, as discussed earlier. It is significant to note that while the case studies presented here were selected as representing good practice – exceeding minimum requirements for community engagement – they continue to reflect a dominance of traditional approaches to engagement. This is despite developers expressing strong commitments to community engagement, and suggests the need to raise awareness amongst developers of the different possible methods and innovative engagement techniques which can be used. In order to capitalise on growing enthusiasm for community engagement, a broader cultural change within the renewables industry may be needed to highlight and challenge the dominance of traditional approaches to engagement.

The case studies are all located within the U.K. and reflect current good practice in that context. Internationally the trend towards greater public/community engagement is equally visible but with varying implications in practice. Community engagement takes place in different ways and at different stages within different national planning contexts. For example, compared to the U.K., in a number of European countries (e.g. Germany, Denmark, France), at least formally community engagement takes place at a much earlier phase and is often focussed on spatial planning or zoning rather than on particular proposed developments. This has implications for the ways that community engagement takes place and also the range of impacts it can have. In our UK case studies, community engagement was usually conducted during pre-application planning when many of the key decisions about design and location had been made.This limits the range of possible outcomes from the engagement and the opportunities for community members to influence aspects of the proposed development.

By contrast in other European countries where greater public engagement occurs in early planning and/or spatial planning processes there may be more opportunities for substantive changes (Aitken, Haggett & Rudolph, 2014). The engagement methods used also vary between different countries. Dialogic approaches, such as workshops, and innovative e-planning methods appear to be more common in other European countries (e.g. Sweden, Denmark) (ibid.) and as such, the dominance of traditional engagement methods illustrated in the U.K. case studies may not reflect wider international experiences.

The classification of community engagement methods used in this research have provided useful tools for reflecting on the practices and rationales of community engagement. In particular, by considering the three broad approaches – Awareness Raising; Consultation; Empowerment – non-hierarchically this model allows for an examination of how such rationales are acted on in practice. Previous models or typologies of public engagement methods have tended to view different methods as representing a hierarchy of approaches with certain approaches being more favourable or meritorious than others. In practice we find that the approaches taken by developers include examples of the different approaches often simultaneously. Indeed, each of the three broad approaches has some merit and utility. It may be in combining these approaches that the overall community engagement approach can be considered to be enhanced. Our research has demonstrated the value of this model for evaluating community engagement approaches, however the model may also have some utility in designing, developing or conducting community engagement through encouraging the explicit reflection on the multiple forms that engagement can take, the range of benefits it can result in and the underlying rationales for conducting community engagement. Through such active reflection, organisations or individuals facilitating community engagement might be encouraged to pursue engagement strategies that include methods which would be positioned in each of the bubbles in the Venn diagram, hence achieving a number of diverse

benefits: increasing awareness; identifying public views/concerns/interests and empowering participants. It is unlikely that any single engagement method could achieve each of these goals, however through combining a range of engagement methods, developers may be able to achieve diverse outcomes while reflecting and adapting to local contexts and needs.

Importantly, it should be noted that good practice community engagement does not necessarily lead to greater rates of planning success. There is some evidence that good community engagement, particularly where this involves dialogic methods, can lessen local opposition, however local community views are only one factor influencing planning decisions. As such, community engagement cannot be seen as a mechanism for securing planning approval. This further draws attention to the relevance of potential substantive – or indirect – benefits of community engagement which can occur even when a proposed wind farm development is not consented.

Our classification of community engagement approaches is not intended as a fixed framework or tool for analysis which can be straightforwardly replicated. Instead its key strength is in encouraging active reflection on the different forms engagement can take and the different rationales which often remain implicit. The process of deliberating on which approaches are being pursued and on which rationales underpin those approaches is valuable when planning, delivering or evaluating community engagement activities. However, these processes will always be highly subjective and inevitably different individuals may classify the same engagement activities differently. Moreover, the three broad approaches – Awareness Raising, Consultation, Empowerment – defy clear-cut definitions and the boundaries between each are somewhat blurry. We consider this blurriness to be an advantage rather than a hindrance since it reflects the fluidity of community engagement and encourages consideration and deliberation of what community engagement means in practice. Particular attention is owed to the classification of empowerment; important questions remain

as to what empowerment means, how it can be pursued and how – or if – it is possible to demonstrate empowerment outcomes. Empowerment may be most easily observed when it is defined in terms of visible impacts of community engagement, however deeper or more long-lasting empowerment may come about through capacity building, increasing social capital or developing the skills and confidence of participants. Such deeper forms of empowerment are difficult to observe or measure through a desk-based study such as this. Greater primary research is needed to further explore the ways that communities and/or individuals can be empowered through community engagement.

References

Agrawal, A. & Gibson, C.C. (1999). 'Enchantment and Disenchantment: The Role of Community in Natural Resource Conservation' *World Development* 27(4): 629-649

Aitken, M., Haggett, C., Rudolph, D. 2014, *Wind Farms Community Engagement Good Practice Review* www.climatexchange.org.uk

Aitken, M. (2014). 'E-Planning and Public Participation: Addressing or aggravating the challenges of public participation in planning?'.*International Journal of E-Planning Research (IJEPR),* 3(2): 38-53.

Aitken, M. (2010a). 'Why we still don't understand the social aspects of wind power: A critique of key assumptions within the literature'. *Energy Policy*, 38(4): 1834-1841.

Aitken, M. (2010b). 'Wind power and community benefits: Challenges and opportunities'. *Energy Policy*, 38(10): 6066-6075.

Aitken, M. (2009). 'Wind power planning controversies and the construction of 'expert'and 'lay'knowledges'. *Science as Culture*, 18(1): 47-64.

Anderson, C. (2013). 'The networked minority: How a small group prevailed in a local windfarm conflict'*Energy Policy* 58: 97-108

Arnstein, S. R. (1969). 'A Ladder of Citizen Participation'. *Journal of the American Institute of Planners*, 35(4): 216-224

Barnett, J., Burningham, K., Walker, G., & Cass, N. (2012). 'Imagined publics and engagement around renewable energy technologies in the UK'. *Public Understanding of Science*, 21(1), 36-50.Batel, S., Devine-Wright, P. & Tangeland, T. (2013). 'Social acceptance of low carbon energy and associated infrastructures: A critical discussion'*Energy Policy* 58: 1-5

BBC (2013) *'Trust in legal challenge to SSE's Stronelairg wind farm'*, 08/08/2013 (http://www.bbc.co.uk/news/uk-scotland-highlands-islands-23620163)

BDOR (2009) *'Pen Y Cymoedd Wind Power Project. Statement of Consultation. Summary Report*. (http://www.vattenfall.co.uk/en/penycymoeddwindfarm/file/Statement_of_consultation__Summary_report_20388847.pdf)

Bell, D., Gray, T., Haggett, C., & Swaffield, J. (2013). 'Re-visiting the 'social gap': public opinion and relations of power in the local politics of wind energy'. *Environmental Politics*, 22(1): 115-135

Bell, D., Gray, T., and Haggett, C. (2005) 'Policy, participation and the social gap in wind farm siting decisions', *Environmental Politics*, 14, 4, 460-477

Brabham, D.C., 2012. 'Motivations for participation in a crowdsourcing application to improve public engagement in transit planning'. *Journal of Applied Communication Research*, 40(3):.307-328.

Brownill, S. & Parker, G., 2010. 'Why bother with good works? The relevance of public participation (s) in planning in a post-collaborative era'. *Planning, Practice & Research*, 25(3):275-282.

Buchy, M. & Hoverman, S. (2000). 'Understanding public participation in forest planning: a review'. *Forest policy and economics* 1(1): 15-25

Chilvers, J. (2008) 'Deliberating competence: theoretical and practitioner perspectives on effective participatory appraisal practice' *Science, Technology, & Human Values*, 33, 155-185

Coleman, S. & Gotze, J. (2010) *Bowling Together: Online public engagement in policy deliberation* www.hansardsociety.org.uk

Creamer, E. (2014) 'The double-edged sword of grant funding: a study of community-led climate change initiatives in remote rural Scotland, *Local Environment* 20(9):1-19

CSE, Centre for Sustainable Energy (2007). 'The Protocol for Public Engagement with Proposed Wind Energy Developments in Wales', *A report for the Renewables Advisory Board and DTI*, May 2007, (http://www.cse.org.uk/pdf/pub1080.pdf)

Davidson, S., McLean, C., Treanor, S., Aitken, M., Cunningham-Burley, S., Laurie, G., Pagliari, C & Sethi, N. (2013). *Public Acceptability of Data Sharing Between the Public, Private and Third Sectors for Research Purposes*. (Social Research series). Scottish Government

DCLG, Department for Communities and Local Government, (2013). 'Planning Act 2008. Guidance on the pre-application process'. January 2013. (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/49468/Planning_Act_2008_pre-applications.pdf)

Devine-Wright, P. (2005). 'Beyond NIMBYism: towards an Integrated Framework for Understanding Public Perceptions of Wind Energy' *Wind Energy* 8:125-139

Dialogue by Design (2008) *Dialogue by Design: A handbook of public and stakeholder engagement (Version 2)* www.dialoguebydesign.net

Ellis, G., Cowell, R., Warren, C., Strachan, P., Szarka, J., Hadwin, R., &Nadaï, A. (2009). 'Wind Power: Is There A "Planning Problem"?' *Planning Theory & Practice* 10(4): 521-547.

Gross, C. (2007). 'Community perspectives of wind energy in Australia: The application of a justice and community fairness framework to increase social acceptance'. *Energy policy*, 35(5): 2727-2736

Haggett, C., & Toke, D. (2005) 'Crossing the great divide – Using multi-method analysis to understand opposition to wind farms', *Public Administration*, 84, 1: 103-120

Haggett, C. (2008). 'Over the sea and far away? A consideration of the planning, politics, and public perceptions of offshore wind farms', *Journal of Environmental Policy and Planning*, 10(3): 289 - 306

Haggett, C. (2009). 'Public engagement in planning for renewable energy', in S. Davoudi and J. Crawford (eds.) *Planning for Climate Change: Strategies for mitigation and adaptation for spatial planners,* London: Earthscan.

Haggett, C. (2010a). 'Why not Nimby? A response, reviewing the empirical evidence', *Ethics, Place, and Environment*, 13(3): 313-316.

Haggett. C. (2010b). 'The principles, procedures, and pitfalls of public engagement in decision-making about renewable energy' in P. Devine-Wright (ed.) *Renewable Energy and the Public*, London: Earthscan

Haggett, C. & Aitken, M. (2015) 'Grassroots Energy Innovations: the Role of Community Ownership and Investment, *Current Sustainable Renewable Energy Reports* 2:98–104

Hall, N., Ashworth, P. & Devine-Wright. P. (2013). 'Social acceptance of wind farms: Analysis of four common themes across Australian case studies'*Energy Policy* 58: 200-208

Healey P (2003) 'Collaborative planning in perspective'. *Planning Theory* 2(2): 101–123.

Hillier J (2000) 'Going round the back? Complex networks and informal action in local planning processes'. *Environment and Planning A* 32: 33–54.

Holmes, T. & Scoones, I. (2000). 'Participatory Environmental Policy Processes: experiences from North and South'*Institute of Development Studies, Working Paper 113*, University of Sussex

Infinergy (2011). 'Burton Wold Wind Farm South. Statement of Community Consultation. (http://files.opendebate.co.uk/files/infinergy/burtonwold/Statement%20of%20Community%20Consultation%20BWWFS%20FINAL.pdf)

INVOLVE (2005). *People and Participation: How to put citizens at the heart of decision-making (*www.involving.org)

INVOLVE (2004). *Involving the Public in NHS, Public Health, and Social Care Research: Briefing notes for researchers* www.invo.org.uk

Kaza N (2006) 'Tyranny of the median and costly consent: A reflection on the justification for participatory urban planning processes'. *Planning Theory* 5(3): 255–270

Kepe, T. (1999). 'The problem of defining 'community': Challenges for the land reform programme in rural South Africa'. *Development Southern Africa*, 16(3), 415-433.

Kubicek, H. (2010). 'The potential of e-participation in urban planning: a European perspective'. *Handbook of research on e-planning: ICTs for urban development and monitoring.* IGI Global, Hershey: 168-194.

Landscape Design Associates (2000) *Cumulative Effects of Wind Turbines: Report on the Preparation of a Planning Tool by means of Consensus Building*, ETSU and the Department of Trade and Industry, London

March A (2004) 'Democratic dilemmas, planning and Ebenezer Howard's Garden City'. *Planning Perspectives* 19: 409–433

Markantoni, M. & Aitken, M. (2015). 'Getting low carbon governance right: learning from actors involved in Community Benefits' *Local Environment* Forthcoming

Mason, J. (2002) Qualitative researching. London: Sage.

OECD (2001). *Citizens as Partners: Information, Consultation and Public Participation in Policy-Making* OECD Publishing www.oecd-ilibrary.org

Pepermans, Y., & Loots, I. (2013). 'Wind farm struggles in Flanders fields: A sociological perspective'. *Energy Policy*, 59: 321-328.

Pieczka, M., & Escobar, O., 2013, 'Dialogue and science: Innovation in policy-making and the discourse of public engagement in the UK' *Science and Public Policy* 40(1): 113-126

PfR, Partnerships for Renewables (2012) 'Carron Valley Wind Farm. Pre-Application Consultation Report. June 2012.' (http://www.pfr.co.uk/documents/Carron%20Valley%20-%20Pre%20application%20consultation%20report%201%20of%204.pdf)

RES, Renewable Energy Systems (2010) 'Glenchamber Wind Farm. Pre-Application Consultation (PAC) Report.' (http://www.res-group.com/media/581048/Glenchamber%20PAC%20Report.pdf)

Rowe, G. & Frewer, L.J. (2005) 'A Typology of Public Engagement Mechanisms' *Science Technology and Human Values* 30(2): 251-290

Rudolph, D. (2014). 'The Resurgent Conflict between Offshore Wind Farms and Tourism: Underlying Storylines'*Scottish Geographical Journal* 130 (3): 168-187

Rudolph, D., Haggett, C. & Aitken, M. (2015). *Community benefits from offshore renewables: good practice review (*www.climatexchange.org.uk)

Rydin, Y., & Pennington, M. (2000). 'Public participation and the local environmental planning: the collective action problem and the potential of social capital', *Local Environment*, 5(2):153-169

Scottish Government (2013a). 'Scottish Planning Policy 2013, Consultation Draft. (http://www.scotland.gov.uk/Resource/0042/00421076.pdf)

Scottish Government (2013b). Scottish Planning Series, Planning Circular 3/2013, Development Management Procedures' (http://www.scotland.gov.uk/Resource/0044/00441568.pdf)

SSE, Scottish & Sourthern Energy (2011). 'Balmacaan and Stronelairg wind farm proposals. Overview. Exhibition Boards.' (http://sse.com/media/128871/Mar-2011-ExhibitionBoardsMarch2011.pdf)

SSE, Scottish & Southern Energy (2012). 'Stronelairg Wind Farm. Environmental Statement: Volume 1 - Non-Technical Summary' (http://sse.com/media/128868/Jun-2012-StronelairgNonTechnicalSummary.pdf)

Toke, D., Breukers, S., & Wolsink, M. (2008). 'Wind power deployment outcomes: How can we account for the differences?'*Renewable and Sustainable Energy Reviews*, 12(4), 1129-1147

UK Government (2015). 'Briefing Paper. Standard Note SN/SC/4370. Planning for onshore wind farms (www.parliament.uk/briefing-papers/sn04370.pdf)

WAG, Welsh Assembly Government (2005). 'Technical Advice Note 8: Planning for Renewable Energy' Planning Policy Wales, July 2005 (http://wales.gov.uk/docs/desh/publications/050701techical-advice-note-8-en.pdf)

WAG, Welsh Assembly Government, (2011). Planning Implications of Renewable and Low Carbon Energy. Practice Guidance. February 2011 (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/225689/Planning_Practice_Guidance_for_Renewable_and_Low_Carbon_Energy.pdf)

Waldo, A. (2012). 'Offshore wind power in Sweden - A qualitative analysis attitudes with particular focus on opponents' *Energy Policy* 41: 692-702

Walker, G. (2011). 'The role for 'community' in carbon governance. *WIREs Climate Change*, 2(5), 777-782.

Wilcox, D. (1994). *The Guide to Effective Participation* (www.partnerships.org.uk)

Wilsdon, J. & Willis, R. (2004). *See-Through Science: Why public engagement needs to move upstream (*www.demos.co.uk)

Wolsink, M. (2007). 'Planning of renewables schemes: Deliberative and fair decision-making on landscape issues instead of reproachful accusations of non-cooperation'. *Energy policy*, 35(5): 2692-2704.

Wolsink, M. (2000). 'Wind power and the NIMBY-myth: institutional capacity and the limited significance of public support' *Renewable Energy* 21: 49-64

Wynne, B. (2006). 'Public engagement as a means of restoring public trust in science–hitting the notes, but missing the music?'*Public Health Genomics*, 9(3): 211-220

**Figure 1: Approaches to Community Engagement**

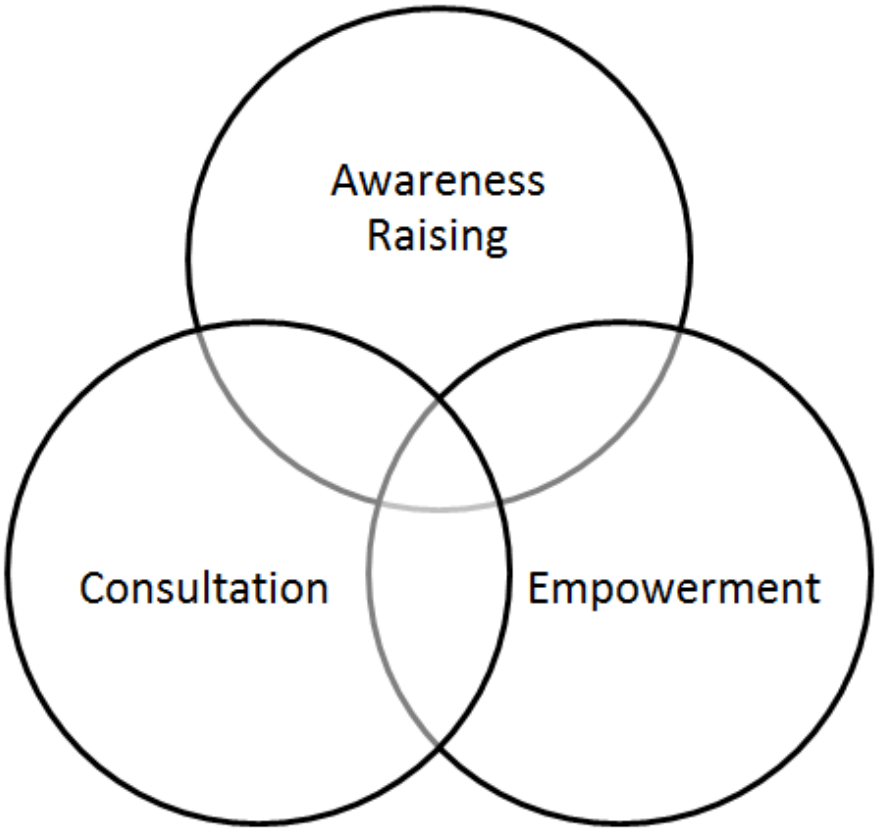

**Figure 2: Overview of Community Engagement Methods Used in Case Studies**

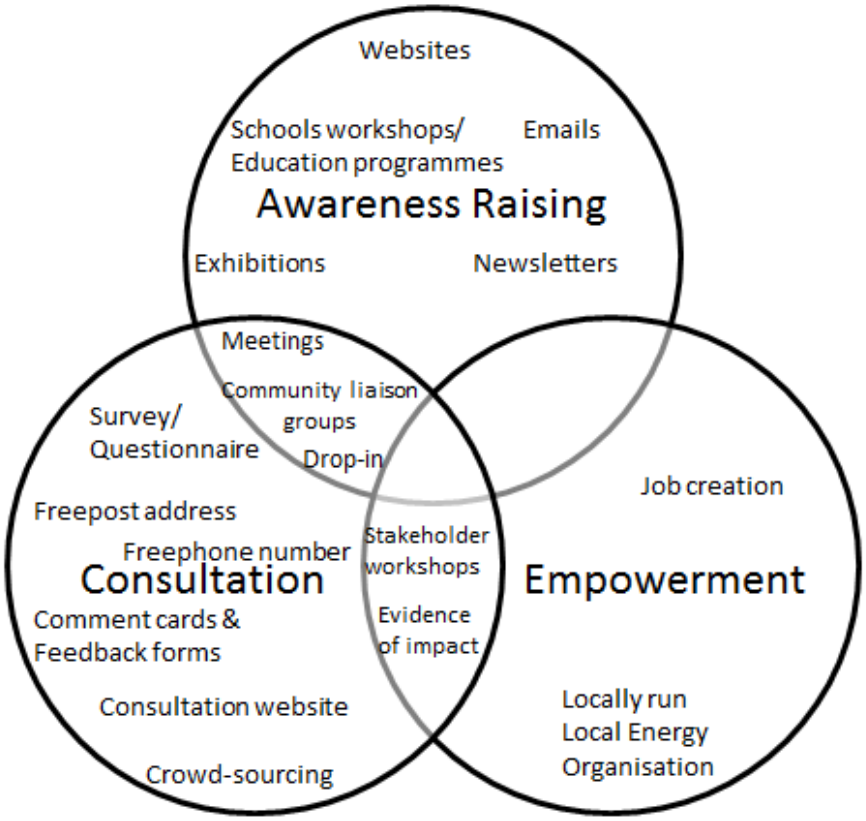

**Table 1: Summary of Case Studies**

| SCOTLAND | | |
|---|---|---|
| **Name of Wind Farm:** | Stronelairg | |
| **Developer/Operator:** | SSE | |
| **Size of Proposed Development:** | 84 turbines, 240 MW<br>(reduced from 144 turbines, 300 MW) | |
| **Current Status:** | Scottish Ministers approved the project which was then reversed in a judicial review initiated by the John Muir Trust in December 2015, whereas the Scottish Government subsequently announced the intention to appeal against the ruling of the Court of Session. | |
| ***Community Engagement Methods Used:*** | | |
| *Awareness Raising* | *Consultation* | *Empowerment* |
| Updates at Council Meetings<br>Community Liaison Officer (post-consent)<br>Community Liaison Group (during construction)<br>Exhibitions | Exhibitions<br>Consultation on Scoping Report | |
| | | |
| **Name of Wind Farm:** | Clyde Wind Farm | |
| **Developer/Operator:** | SSE | |
| **Size of Proposed Development:** | 152 turbines, 350 MW<br>(reduced from 197 turbines) | |
| **Current Status:** | Operational since September 2012 | |
| ***Community Engagement Methods Used:*** | | |
| *Awareness Raising* | *Consultation* | *Empowerment* |
| Schools education programme<br>Open day<br>Exhibitions (roadshow and fixed) | Exhibitions (roadshow and fixed) | |
| **Points of Interest:** | Planning permission was originally refused but granted after appeal (public inquiry).<br>Planning consent of an extension of 54 turbines was granted in July 2014. | |
| | | |
| **Name of Wind Farm:** | Glenchamber | |
| **Developer/Operator:** | RES | |
| **Size of Proposed Development:** | 11 turbines | |
| **Current Status:** | Consented July 2012 | |
| ***Community Engagement Methods Used:*** | | |
| *Awareness Raising* | *Consultation* | *Empowerment* |
| Exhibitions<br>Newsletters<br>Emails<br>Meetings<br>Community Liaison Group | Meetings<br>Community Liaison Group<br>Questionnaire<br>Telephone survey<br>Comment cards | |
| **Points of Interest:** | Planning permission was originally refused but granted after appeal. | |
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|---|---|---|
| **Name of Wind Farm:** | Carron Valley | |
| **Developer/Operator:** | Partnership for Renewables (PfR) | |
| **Size of Proposed Development:** | 15 turbines, 45 MW<br>(Reduced from 60 turbines) | |
| **Current Status:** | Refused planning permission | |
| ***Community Engagement Methods Used:*** | | |
| *Awareness Raising* | *Consultation* | *Empowerment* |
| Exhibitions<br>Micro-site of wind farm<br>Meetings | Meetings<br>Discussions and feedback forms | Evidence of impact |
| | | |
| **ENGLAND** | | |
| **Name of Wind Farm:** | Burton Wold - South | |
| **Developer/Operator:** | Infinergy | |
| **Size of Proposed Development:** | 5 turbine extension to existing 10 turbines (plus another 7 turbine extension) – total capacity: 11.5 MW | |
| **Current Status:** | Consented March 2012 | |
| ***Community Engagement Methods Used:*** | | |
| *Awareness Raising* | *Consultation* | *Empowerment* |
| Information booklet<br>Open days<br>School workshop<br>Door-knocking | Comment cards<br>Freephone number<br>Freepost address<br>Consultation with parish councils<br>Consultation website | Locally run Local Energy Organisation |
| **Points of Interest:** | This is an extension of the Burton Wold Wind Farm<br>Infinergy's adopted a pre-application community involvement strategy despite no legal regulations dictating such a process for a relatively small wind farm. | |
| | | |
| **WALES** | | |
| **Name of Wind Farm:** | Pen Y Cymoedd | |
| **Developer/Operator:** | Vattenfall | |
| **Size of Proposed Development:** | 76 turbines, 256 MW | |
| **Current Status:** | Consented May 2012 | |
| ***Community Engagement Methods Used:*** | | |
| *Awareness Raising* | *Consultation* | *Empowerment* |
| Website<br>Newsletter<br>Meetings with councils<br>Drop-in | Meetings with councils<br>Drop-in<br>Survey<br>Crowd-sourcing regarding community benefits<br>Stakeholder workshops | Stakeholder workshops<br>Feedback on impact |
| **Points of Interest:** | The planning and delivery of the consultation process was appointed to an external company, BDOR Limited, who also drafted the statement of consultation. | |